



F-DS1E-X FOR ET 200S FAILSAFE DIRECT STARTER
 SETTING RANGE 2.4...16A, MECHANICAL
 SWITCHING, ELECTRONIC PROTECTION, AC-3, TO
 7.5KW/400V, CAN BE EXPANDED, FOR BRAKE
 CONTROL MODULE FOR 2DI CONTROL MODUL

General technical data:

product brandname		Sirius
Product designation		motor starter ET 200S
Design of the product		direct starter
Product function		
• Bus communication		Yes
• direct start		Yes
• reverse starting		No
• on-site operation		Yes
• Short circuit protection		Yes
Design of the switching contact		electromechanical
Product component Motor brake output		Yes
Trip class		CLASS 10 and 20 adjustable
Type of assignment		2
Product feature		
• brake control with 230 V AC		No
• brake control with 24 V DC		No
• brake control with 180 V DC		No
• brake control with 500 V DC		No

Product extension braking module for brake control		Yes
Surge voltage resistance rated value	kV	6
Insulation voltage rated value	V	500
Power loss [W] typical	W	18
maximum permissible voltage for safe isolation between main and auxiliary circuit	V	400
Equipment marking acc. to DIN EN 61346-2		Q
Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		A
Mounting type		pluggable on terminal module
Depth	mm	150
Height	mm	290
Width	mm	65

Main circuit:

Operating voltage rated value	V	200 ... 400
Adjustable pick-up value current of the current-dependent overload release	A	2.4 ... 16
Operating power		
• at AC-3 at 400 V rated value	kW	7.5
• for three-phase motors at 400 V at 50 Hz minimum	kW	1.1
• for three-phase motors at 400 V at 50 Hz maximum	kW	7.5
Maximum short-circuit current breaking capacity (Icu) at 400 V rated value	kA	50
Design of short-circuit protection		circuit-breakers
Number of poles for main current circuit		3
Type of the motor protection		solid-state
Mechanical service life (switching cycles) of the main contacts typical		100 000

Control circuit/ Control:

Type of voltage of the control supply voltage		DC
Control supply voltage 1 at DC	V	24 ... 24
Control supply voltage 1 at DC rated value	V	21.6 ... 26.4

Supply voltage:

Type of voltage of the supply voltage		DC
Supply voltage 1 at DC	V	24 ... 24
Supply voltage 1 at DC rated value	V	20.4 ... 28.8

Ambient conditions:

Protection class IP		IP20
Ambient temperature		
• during operation	°C	0 ... 60

<ul style="list-style-type: none"> during storage 	°C	-40 ... +70
<ul style="list-style-type: none"> during transport 	°C	-40 ... +70
Relative humidity during operation	%	5 ... 95
Vibration resistance		2g
Shock resistance		5g / 11 ms
Degree of pollution		3 at 400 V, 2 at 500 V according to IEC60664 (IEC61131)
Installation altitude at height above sea level maximum	m	2 000
Mounting position		vertical, horizontal

Communication/ Protocol:

Protocol is supported		
<ul style="list-style-type: none"> PROFIBUS DP protocol 		Yes
<ul style="list-style-type: none"> PROFINET protocol 		Yes
<ul style="list-style-type: none"> AS-interface protocol 		No
Design of the interface PROFINET protocol		Yes
Type of electrical connection		
<ul style="list-style-type: none"> of the communication interface 		via backplane bus
<ul style="list-style-type: none"> for communication transmission 		via backplane bus

Connections/ Terminals:

Number of digital inputs		2
Number of sockets		
<ul style="list-style-type: none"> for digital input signals 		0
<ul style="list-style-type: none"> for digital output signals 		0
Product function		
<ul style="list-style-type: none"> digital inputs parameterizable 		Yes
<ul style="list-style-type: none"> digital outputs parameterizable 		No
Type of electrical connection		
<ul style="list-style-type: none"> 1 for digital input signals 		using control module
<ul style="list-style-type: none"> 2 for digital input signals 		using control module
Type of electrical connection		
<ul style="list-style-type: none"> at the manufacturer-specific device interface 		plug
<ul style="list-style-type: none"> for main energy infeed 		screw-type terminals
<ul style="list-style-type: none"> for load-side outgoing feeder 		Screw-type terminals
<ul style="list-style-type: none"> for main energy transmission 		via energy bus
<ul style="list-style-type: none"> for supply voltage line-side 		via backplane bus
<ul style="list-style-type: none"> for supply voltage transmission 		via backplane bus
<ul style="list-style-type: none"> for main current circuit 		screw-type terminals

Electromagnetic compatibility:

EMI immunity acc. to IEC 60947-1		corresponds to degree of severity 3, ambience A (industrial sector)
---	--	---

Conducted interference due to burst acc. to IEC 61000-4-4		2 kV on voltage supply, inputs and outputs
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5		2 kV (U > 24 V DC)
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5		1 kV (U > 24 V DC)
Field-bound parasitic coupling acc. to IEC 61000-4-3		80 MHz ... 1 GHz 10 V/m, 1.4 GHz ... 2 Hz 3 V/m, 2 GHz ... 2.7 GHz 1 V/m
EMC emitted interference acc. to IEC 60947-1		CISPR11, ambience A (industrial sector)

Safety related data:

Protection against electrical shock	finger-safe
-------------------------------------	-------------

Certificates/ approvals:

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity
 CCC	 UL	 EG-Konf.
 CSA	 EAC	Type Examination

Test Certificates	other
Type Test Certificates/Test Report	Environmental Confirmations
	Confirmation

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RK1301-0CB13-0AA2>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RK1301-0CB13-0AA2>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RK1301-0CB13-0AA2&lang=en

last modified:

08/11/2017